

What is claimed is:

1(currently amended). A vehicle detector and classifier comprising:
at least one electrically conductive loop arranged in a road having a road surface,
wherein said at least one loop is arranged substantially in a plane perpendicular to the
road surface, thereby defining an axis of the loop extending substantially parallel to the
road surface, and, wherein said plane extends laterally across the road, oriented in
a direction substantially perpendicular to a direction of travel along the road.

Cancel claims 2 and 3, without prejudice.

~~2(now canceled). A detector according to claim 1, wherein said
plane extends laterally across the road in a direction perpendicular to a
direction of travel along the road.~~

~~3(now canceled). A detector according to claim 1, wherein said
plane extends parallel to a longitudinal axis of the road, and parallel to a
direction of travel along the road.~~

4(currently amended). A vehicle detector and classifier comprising:
~~A detector according to claim 1,~~
a plurality of electrically conductive loops arranged in a road having a road
surface, wherein said loops are arranged substantially in a plane perpendicular to
the road surface, thereby defining an axis of each of the loops extending
substantially parallel to the road surface;
wherein said at least one loop comprises a plurality of loops are arranged in a
line in a slot cut into the road surface, and, wherein said line extends laterally
across the road in a direction perpendicular to a direction of travel along the
road.

5(previously amended). A detector according to claim 4, wherein at least one active electronic component is located in the slot and adjacent to said at least one loop.

6 (currently amended). **A vehicle detector and classifier comprising:**
~~A detector according to claim 5,~~
a plurality of electrically conductive loops arranged in a line in a slot cut into a surface of a road, wherein said loops are arranged substantially in a plane perpendicular to the road surface, thereby defining an axis of each said loop extending substantially parallel to the road surface;
wherein at least one active electronic component is located in the slot and adjacent to at least one said loop;

wherein the components are mounted on circuits at regular intervals, said circuits comprising one of a small hybrid circuit and a thick film circuit.

7(previously amended). A detector according to claim 1, wherein the at least one loop is encapsulated in a semi-rigid enclosure.

8(previously amended). A detector according to claim 1, wherein said at least one loop is substantially rectangular as viewed along the axis.

9(previously amended). A detector according to claim 1, wherein said at least one loop comprises a plurality of turns.

10 (currently amended). A detector according to claim 1, further comprising an inductive loop arranged substantially along a plane of the road surface, thereby defining an axis of the inductive loop extending substantially perpendicular to the road surface.

11(currently amended). **A vehicle detector and classifier comprising:**
~~A detector according to claim 10,~~
at least one electrically conductive loop arranged in a road having a road surface, wherein said at least one loop is arranged substantially in a plane perpendicular to the road surface, thereby defining an axis of the loop extending substantially parallel to the road surface;

further comprising an inductive loop arranged substantially along a plane of the road surface, thereby defining an axis of the inductive loop extending substantially perpendicular to the road surface; and,

further comprising means for superposing a result obtained from the at least one loop arranged substantially along the plane of the road surface and a result obtained from the at least one loop arranged substantially in the plane perpendicular to the road surface, and means for displaying the results as thereby superposed.